

May 14, 2012

Marlene H. Dortch, Secretary
Federal Communications Commission
445 Twelfth Street, SW
Washington, DC 20554

Re: ET Docket No. 08-59, Amendment of the Commission's Rules to Provide
Spectrum for the Operation of Medical Body Area Networks

Dear Ms. Dortch,

On May 10, 2012, the following representatives met with Commissioner Clyburn and her legal advisor, Louis Peraertz, to discuss the above-referenced proceeding. Philips Healthcare: Delroy Smith, Principal Scientist & David Siddall, counsel; GE Healthcare: Ari Fitzgerald, counsel; Aerospace & Flight Test Coordinating Council (AFTRCC): Ken Keane, counsel; American Society for Healthcare Engineering of the American Hospital Association (ASHE): Lawrence Movshin, counsel.

The meeting focused on the benefits that MBANS will provide, including improved delivery of patient care and reduction in overall healthcare costs. A copy of the presentation is attached. In addition, there was discussion about the transition plan that the parties have requested be in place for each hospital before the spectrum is coordinated. AFTRCC stressed that the proposals presented to the Commission for its consideration were important for the protection of primary flight test telemetry operations, and the safety-related nature of those operations. ASHE, AFTRCC, Philips and GE all re-affirmed their support for the proposal, stating their belief that requiring such a transition plan will further assure all parties that any case of interference can be rapidly resolved without adversely affecting patient care.

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Respectfully Submitted,

/s/

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Attachment

Medical Body Area Networks (“MBANs”), Docket 08-59

Summary presented jointly by Philips Healthcare, GE Healthcare, the Aerospace Flight Test Coordinating Council (AFTRCC), and the American Society of Healthcare Engineering, American Hospital Association (ASHE)

MBANS

Expansion of monitoring capabilities will improve the delivery of patient care and reduce health care costs by extending monitoring to all patients, speeding diagnosis, allowing earlier intervention, and soliciting faster clinician response. Today, monitoring in hospitals is costly and requires multiple wired connections that limit patient mobility. Currently only about 50 % of hospital patients -- primarily those under acute and critical care -- are constantly monitored. Studies show that monitoring non-critical patients allows detecting events earlier and lessens their consequence before the patient becomes critical.

- MBANs are wireless monitors that solve a problem not addressed by current wireless monitors – a “last meter” wireless link to eliminate the wires and cables that currently tether a patient to the monitor. Untethering patients will allow them freedom of movement to walk and exercise, resulting in more rapid recovery and discharge.
- MBANs promise is to reduce overall healthcare costs by streamlining clinical workflow by, for example, eliminating unintentional unplugging of leads and the requirement to sterilize re-usable cables. Patient outcomes will be improved by post-operative patient mobility, reduced infection rates, and earlier diagnosis and intervention due to earlier detection of impending events.
- MBAN monitors will extend care beyond traditional settings to patients wherever they are, from the hospital to emergency vehicles to the home.
- Predictive software built into the network, based upon pattern recognition, will alert practitioners to possible abnormalities even before vital signs may be indicative.
- The body is an integrated system and medicine is moving into a world of looking at patient parameters as an integrated whole. MBANS will further this integrated approach with more measurements of higher accuracy in diagnostics, resulting in improved treatment.
- Automatic preservation of patient data in their electronic health records will be facilitated.

SPECTRUM

The 2.36-2.4 GHz spectrum allows MBANS to benefit from the multiple technologies and devices already mass produced for the 2.4 GHz license-exempt band. This particular spectrum will significantly lower device cost, which in turn will foster increased penetration of MBANS and the spread of its benefits. Lower costs and better patient outcomes will benefit the entire healthcare system.

The 2.3 GHz spectrum at issue primarily is being used for testing aircraft and missiles by aerospace manufacturers and the U.S. Government. Frequency coordination is performed by AFTRCC in concert with the Government agencies. In a months-long process Philips, GE and AFTRCC collaborated to produce a joint proposal to the FCC for sharing this spectrum. ASHE, the coordinator for Wireless Medical Telemetry Service (“WMTS”) spectrum used at hospitals, joined to provide their expertise in the location of hospitals and spectrum management needs unique in the medical environment.

- The joint proposal employs a combination of proven propagation prediction techniques, traditional co-ordination registration, and MBANS automated device features that together enable reliable sharing of 2360-2390 MHz without interference between primary aeronautical mobile telemetry (“AMT”) operations and the new secondary MBANS in healthcare facilities.
- The MBAN rules proposed by Philips, GE, and AFTRCC incorporate a technological means of enforcing secondary status for MBANS that will protect safety-related flight test communications.
- Implementation of a time-limited electronic key in MBANs devices – an electronic authorization – prevents MBANs equipment from operating except when authorized. In addition to this “turn-on” feature, continued operation of each patient device in the protected 2360-2390 MHz spectrum is possible only while the device receives a signal from fixed devices within the hospitals (similar to WiFi Access Points).
- A small number of locations having line-of-sight to AMT receive sites, estimated at fewer than 2 percent of all hospitals, may be able to use portions of 2360-2390 MHz only when not utilized by AMT services.
- MBANs devices will be permitted to use 2390-2400 MHz on a secondary basis at slightly higher power without geographic restriction. This will allow use of MBANS in homes, ambulances, and wherever else desired.
- An MBANS spectrum coordinator will be appointed by the FCC to coordinate hospital use of the spectrum, subject to an agreement and joint approval from AFTRCC (the current coordinator).
- A transition plan will be required for each coordinated MBANS installation to ensure that changes in AMT use can be accommodated.

The joint proposal achieves a creative solution to spectrum sharing by building upon technology and a robust coordination regime. Philips, GE and AFTRCC urge Commission approval of their proposal.